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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,857	11/19/2001	Yan Hou	2207/13282	1241

26646 7590 06/07/2005

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EXAMINER

MAI, TAN V

ART UNIT	PAPER NUMBER
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2193

DATE MAILED: 06/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/989,857	Applicant(s) HOU ET AL.	
	Examiner Tan V. Mai	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-9,19 and 20 is/are allowed.
- 6) ☒ Claim(s) 10-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 13-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per independent claim 13, what are the input/output of the system? What is the relationship between AMAAC and MAAC?

As per independent claim 16, the claim language is vague and indefinite. For instance, although the preamble of independent claim 10 claims "a digital processor ...", the claim only recites TWO components. The claim fails to recite the necessary detail physical interconnection between these component to perform the recited function(s) nor are there any recitation describing how such an apparatus (or components) is actually provided in the apparatus. Sufficient detail apparatus or elements must be recited to adequately describe and constitute the proposed apparatus. Also, claim 16 seems to be incomplete in that they recite only a portion of the methodology required for the processor to become operational, i.e., they omit essential elements and/or interconnection. See MPEP 2172.01.

3. Claims 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hung et al.

Rejection grounds continue to be those set forth in the previous office action (Paper dated 5/12/04, paragraph 5).

4. Claims 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata.

Rejection grounds continue to be those set forth in the previous office action (Paper dated 5/12/04, paragraph 7).

5. Applicant's arguments filed on 11-15-04 have been fully considered but they are not persuasive.

Applicant, in his remarks, argues that:

(1). "[a]s to claims 10, 13 and 16, these claims do recite interconnections between components and satisfy the requirements of 112, second paragraph... There is no requirement under 112, second paragraph, to provide the detail of operation suggested in the Office Action"; and

(2). "[f]irst, with respect to the Iwata and Kim references, neither of these references refer to downsampling at all. Furthermore, though these references, as well as the Hung reference, disclose adding, multiplying, and switching components, there is no suggestion in Iwata, Kim, or Hung to configure them into MAAC and AMAAC kernels as recited in the pending claims. To be appropriate in a 103(a) context, there must be some suggestion in the prior art to accomplish the claimed invention. Since MAAC and AMAAC kernels are not suggested and downsampling is not mentioned at all in the Iwata and Kim references, the rejection of the claims under 103(a) is improper. Since features of the pending claims are neither shown nor suggested by the Hung, Kim or Iwata references, reconsideration and withdrawal of the rejection of claims 10-18 under 35 U.S.C. 103(a) is respectfully requested" (emphasis added).

With respect to the arguments, the examiner carefully reviews all the claimed invention and the applied references.

(1). In claim 13, there is NO interconnection between AMAAC kernel and MAAC kernel. Also, there is NO input(s) for "multiplier block" [of MAAC kernel]. In claim 16, there is NO interconnection between AMAAC kernel and MAAC kernel; and

(2). Hung et al and Iwata do show the MAAC and AMAAC kernels and their detail structure as claimed (see previous Office Action, Paragraphs 5 & 7 "As per

dependent claims 2-5"). Hung et al do show the "downsampling or upsampling option" feature (e.g., see abstract). It is noted that the "downsampling mode" & "non-downsampling mode" (Claim 10) and "downsampling" (Claim 13) in the preambles are not limiting because the bodies of these claims describe structurally complete inventions such that deletion of the preamble phrases do not affect the structure of the claimed inventions. Therefore, the rejections are still proper.

6. The following is an examiner's statement of reasons for allowance: the recorded references do NOT teach or suggest the novel "switching fabric to switch between a downsampling mode of operation and a non-downsampling mode of operation" feature as recited in independent claim 1. Similar language is used in independent claim 19.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2193

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan V. Mai whose telephone number is (571) 272-3726.

The examiner can normally be reached on Mon-Wed and Fri. from 9:30am to 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki, can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is:

Official (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.



Tan V. Mai
Primary Examiner